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10/631,000	07/30/2003	Todd Alexander Lutz	10017594-2	7722

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EXAMINER

KASSA, HILINA S

ART UNIT	PAPER NUMBER
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2625

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/631,000	Applicant(s) LUTZ, TODD ALEXANDER	
	Examiner HILINA S. KASSA	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,4 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,4 and 25-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 04/22/2008, with respect to claims 3, 4, 23 and 25-33 have been fully considered and are persuasive. The Final rejection of claims 3, 4 and 25-33 has been withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3, 4 and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vatland et al. (US Patent Number 6,091,507) and in view of Beck et al. (US Patent Number 5,146,547).

(1) regarding claim 25:

As shown in figure 4, Vatland et al. disclose a printing system (**column 5, lines 29-39; note that the system includes network bus, raster network bus, printers, print server, computer systems etc.**), comprising:

a storage device in communication with a network (**90, figure 4; column 5, lines 60-65**); and

a server in communication with the network (**82, figure 4, column 7, lines 8-11; note that the printer server is coupled to the network**), the server configured to:
receive an unrasterized version of a given print job from the network (**column 7, lines 8-10; note that the printer server receives PDL or unrasterized form of a print job**); and

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching in response to receiving the print job, search the storage device to determine whether a rasterized version of the given print job is stored on the storage device.

However, Beck et al. teaches in response to receiving the print job (**column 7, lines 21-23; note that the input data received is stored in the page buffer**), search the storage device to determine whether a rasterized version of the given print job is stored on the storage device (**column 7, lines 24-31; note that the processor examines each packed if it has been already rasterized**).

Vatland et al. and Beck et al. are combinable because they are from the same field of endeavor i.e. processing data for printers. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art wherein, in response to receiving the print job, search the storage device to determine whether a rasterized version of the given print job is stored on the storage device. The suggestion/motivation for doing so would have been in order to prevent re-rasterizing a print job and to acquire an efficient memory (column 2, lines 42-45). Therefore, it would have been obvious to combine Vatland et al. with Beck et al. to obtain the invention as specified in claim 25.

(2) regarding claim 3:

Vatland et al. further disclose, the printing system of claim 25, wherein said storage device is configured to store a plurality of rasterized print jobs generated by a plurality of image producing devices (**column 5, line 60-column 6, line 2; note that the data buffer 90 is large enough to store plurality of raster images**), said plurality of image producing devices being in communication with the network (**column 5, lines 44-50; note that the image producing devices are communicating via network**).

(3) regarding claim 4:

Vatland et al. further disclose, the printing system of claim 25, further comprising one or more print job generators (**column 5, lines 35-36; note that computer systems 70 and 72 are used to generate print jobs**), each print job generator being configured to generate a respective print job (**column 5, lines 44-45; note that computer system 70 generates PDL print jobs**), said print job generators being in communication with the network (**column 5, lines 44-46; note that the print job generator 70 is in communication with the network 100**).

(4) regarding claim 26:

Vatland et al. further disclose the printing system of claim 25, further comprising a print engine in communication with the network (**column 5, lines 54-56; note that the raster data buffer 90, stores raster data in preparation for printing the raster data**

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at the print engine), wherein the server is configured to send the rasterized version of the given print job to the print engine (**column 5, lines 51-56; note that raster connection management 92 maintains unique virtual connections between printer 76 and the devices providing raster data i.e. server for printing at the print engine 88**).

(5) regarding claim 27:

As shown in figure 4, Vatland et al. disclose a printing system (**column 5, lines 29-39; note that the system includes network bus, raster network bus, printers, print server, computer systems etc.**), comprising:

means for receiving an unrasterized version of a print job from a network (**column 7, lines 8-10; note that the printer server receives PDL or unrasterized form of a print job**);

means for determining whether a rasterized version of the print job is stored on a storage means connected to the network (**column 5, lines 60-65; note that the data buffer 90 stores the rasterized image**);

means for retrieving the rasterized version of the print job from the storage means in response to determining that the rasterized version is stored (**column 6, lines 2-9; note that after storing the rasterized images, repetitive printing could be made at the initiation of the user**);

means for sending the rasterized print job to a means for printing an image from the rasterized print job (**column 3, lines 3, lines 47-49; note that the rasterized document gets printed by the printer**).

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching means for converting the unrasterized print job into rasterized format in response to determining that no rasterized version is stored.

However, Beck et al. teach means for converting the unrasterized print job into rasterized format in response to determining that no rasterized version is stored (**column 7, lines 43-49; note that if there is unrasterized portion or if the packet data has not yet been fully rasterized, the processor processes the packet to be rasterized as also explained in line 38-41**).

Vatland et al. and Beck et al. are combinable because they are from the same field of endeavor i.e. processing data for printers. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have a means for converting the unrasterized print job into rasterized format in response to determining that no rasterized version is stored. The suggestion/motivation for doing so would have been in order to acquire an efficient memory organization (column 2, lines 54-60). Therefore, it would have been obvious to combine Vatland et al. with Beck et al. obtain the invention as specified in claim 27.

(6) regarding claim 28:

Vatland et al. further disclose the printing system of claim 27, further comprising means for processing the stored rasterized version of the print job into a new rasterized print job (**column 6, line 59-column 7, line 7; note that a printer is selected based on its profile information and the media/ink correction module uses media and ink information of the selected printer to adjust for media and ink differences so it produces a new rasterized form**)

(7) regarding claim 29:

Vatland et al. further disclose the printing system of claim 27, further comprising: means for determining whether the rasterized version of the print job is completely rasterized (**column 5, lines 61-62; note that one complete raster image of a document is stored in the buffer 90**); and

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching means for completing rasterization of the print job in response to determining that the print job is not completely rasterized.

However, Beck et al. disclose means for completing rasterization of the print job in response to determining that the print job is not completely rasterized (**column 8, lines 8-12; note that if the cursor has reached the end of the packet data for the packet that has been rasterized, the processing is complete**).

Vatland et al. and Beck et al. are combinable because they are from the same field of endeavor i.e. processing data for printers. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have a means for

completing rasterization of the print job in response to determining that the print job is not completely rasterized. The suggestion/motivation for doing so would have been in order to advance the systems efficiency and reliability (column 2, lines 54-60). Therefore, it would have been obvious to combine Vatland et al. with Beck et al. to obtain the invention as specified in claim 29.

(8) regarding claim 30:

As shown in figure 4, Vatland et al. disclose a printing method (**column 5, lines 29-39; note that the method includes network bus, raster network bus, printers, print server, computer systems etc.**), comprising:

receiving an unrasterized version of a print job (**column 7, lines 8-10; note that the printer server receives PDL or unrasterized form of a print job**);

in response to receiving, determining whether a rasterized version of the print job is stored on a storage device (**column 5, lines 60-65; note that the data buffer 90 stores the rasterized image**);

retrieving the rasterized version of the print job from the storage device in response to determining that the rasterized version is stored (**column 6, lines 2-9; note that after storing the rasterized images, repetitive printing could be made at the initiation of the user**);

printing an image from the rasterized print job (**column 3, lines 47-49; note that the rasterized document gets printed by the printer**).

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching to convert the unrasterized print job into rasterized format in response to determining that no rasterized version is stored.

However, Beck et al. teach converting the unrasterized print job into rasterized format in response to determining that no rasterized version is stored (**column 7, lines 43-49; note that if there is unrasterized portion or if the packet data has not yet been fully rasterized, the processor processes the packet to be rasterized as also explained in line 38-41**).

Vatland et al. and Beck et al. are combinable because they are from the same field of endeavor i.e. processing data for printers. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to convert the unrasterized print job into rasterized format in response to determining that no rasterized version is stored. The suggestion/motivation for doing so would have been in order to acquire an efficient memory organization (column 2, lines 54-60). Therefore, it would have been obvious to combine Vatland et al. with Beck et al. obtain the invention as specified in claim 30.

(10) regarding claim 31:

Vatland et al. further disclose the method of claim 30, further comprising processing the stored rasterized version of the print job into a new rasterized print job (**column 6, line 59-column 7, line 7; note that a printer is selected based on its profile information and the media/ink correction module uses media and ink**

information of the selected printer to adjust for media and ink differences so it produces a new rasterized form).

(11) regarding claim 32:

Vatland et al. further disclose the method of claim 30, further comprising:
determining whether the rasterized version of the print job is completely rasterized (**column 5, lines 61-62; note that one complete raster image of a document is stored in the buffer 90**); and

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching completing rasterization of the print job in response to determining that the print job is not completely rasterized.

However, Beck et al. discloses completing rasterization of the print job in response to determining that the print job is not completely rasterized (**column 8, lines 8-12; note that if the cursor has reached the end of the packet data for the packet that has been rasterized, the processing is complete**).

Vatland et al. and Beck et al. are combinable because they are from the same field of endeavor i.e. processing data for printers. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to complete rasterization of the print job in response to determining that the print job is not completely rasterized. The suggestion/motivation for doing so would have been in order to advance the systems efficiency and reliability (column 2, lines 54-60). Therefore, it would have been

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obvious to combine Vatland et al. with Beck et al. to obtain the invention as specified in claim 32.

(12) regarding claim 33:

Vatland et al. further disclose a system for use in printing an image (**column 5, lines 29-39; note that the system includes network bus, raster network bus, printers, print server, computer systems etc.**), comprising:

a network (**66, figure 4; column 5, lines 36-39**);

a storage device in communication with the network (**90, figure 4; column 5, lines 40-42; note that the raster data buffer is in the printer 76 which is communicating with the network**);

a first processor in communication with the network (**70, figure 4**) and configured to:

generate an unrasterized version of a print job (**column 5, lines 44-45; note that the computer system 70 generates PDL data**); and

transmit the unrasterized version of the print job over the network (**column 5, lines 45-47; note that after generating the PDL, it sends it to the printer over the network**); and

a second processor in communication with the network (**76, figure 4**) and configured to:

receive the unrasterized version of the print job from the network (**column 5, lines 47-49; note that the printer 76 receives the PDL or unrasterized version of the print job**); and

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching in response to receiving the unrasterized version of the print job, determine whether a rasterized version of the print job is available on the storage device.

However, Beck et al. teach in response to receiving the unrasterized version of the print job (**column 7, lines 21-23; note that the input data received is stored in the page buffer**), determine whether a rasterized version of the print job is available on the storage device (**column 7, lines 24-31; note that the processor examines each packed if it has been already rasterized**).

Vatland et al. and Beck et al. are combinable because they are from the same field of endeavor i.e. processing data for printers. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art wherein, in response to receiving the unrasterized version of the print job, determine whether a rasterized version of the print job is available on the storage device. The suggestion/motivation for doing so would have been in order to prevent re-rasterizing a print job and to acquire an efficient memory (column 2, lines 42-45). Therefore, it would have been obvious to combine Vatland et al. with Beck et al. obtain the invention as specified in claim 33.

Conclusion

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4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore could be reached at (571) 272- 7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pari-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hilina S Kassa/
Examiner, Art Unit 2625
May 13, 2008

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625